

#### United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

### NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

8/07/2002

BANNER & WITCOFF, LTD. 1001 G STREET, N.W. 11TH FL. WASHINGTON, DC 20001

EXAMINER				
SOUAYA, JEHANNE E				
ART UNIT	CLASS-SUBCLASS			
1634	435-006000			

DATE MAILED: 08/07/2002

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/164,764	10/01/1998	DAVID SIDRANSKY	01107.76459	7055

TITLE OF INVENTION: DETECTION OF HYPERMUTABLE NUCLEIC ACID SEQUENCE IN TISSUE AND BODY FLUIDS

APPLN, TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$640	\$0	\$640	11/07/2002

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. <u>THIS STATUTORY PERIOD CANNOT BE EXTENDED</u>. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above. If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

B. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

## PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Box ISSUE FEE

**Commissioner for Patents** Washington, D.C. 20231

				(703)746-4000		
INSTRUCTIONS: This for appropriate. All further corr indicated unless corrected b maintenance fee notification	respondence including the selow or directed otherwise	nsmitting the ISSUE FEI Patent, advance orders a e in Block I, by (a) spec	E and PUBLIC nd notification ifying a new co	ATION FEE (if r of maintenance fe orrespondence add	required). Blocks I through 4 ses will be mailed to the current ress; and/or (b) indicating a sep	hould be completed wher correspondence address a arate "FEE ADDRESS" fo
CURRENT CORRESPONDENCE 75 BANNER & WIT	E ADDRESS (Note: Legibly mark-u 90 08/07/2002 CCOFF, LTD.	p with any corrections or use Blo	ek I)	Fee(s) Transmit accompanying p	te of mailing can only be used for ttal. This certificate cannot papers. Each additional paper, s must have its own certificate of r	be used for any other such as an assignment or
1001 G STREET, N.W. 11TH FL. WASHINGTON, DC 20001				I hereby certify United States Po envelope address transmitted to the	Certificate of Mailing or Tran that this Fee(s) Transmittal is stal Service with sufficient posta sed to the Box Issue Fee address e USPTO, on the date indicated by	being deposited with the ge for first class mail in an above, or being facsimile
						(Depositor's name
						(Signature
						(Date
APPLICATION NO.	FILING DATE	FIRST	NAMED INVEN	TOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/164,764	10/01/1998	. DAV	VID SIDRANSI	ζY	01107.76459	7055
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APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBL	CATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$640		\$0	\$640	11/07/2002
EXAMIN	NER	ART UNIT	CLASS-SUBCI	ASS		•
SOUAYA, JEI	HANNE E	1634	435-00600	0		
CFR 1.363).  Change of corresponde Address form PTO/SB/12  "Fee Address" indication	ce address or indication of ence address (or Change of 22) attached. on (or "Fee Address" Indica or more recent) attached. Us	Correspondence	the names of u or agents OR, single firm (ha attorney or age registered pater	on the patent from to 3 registered paternatively, (2) aving as a membert) and the name at attorneys or agence will be printed.	the name of a er a registered es of up to 2	
been previously submitted (A) NAME OF ASSIGNED	n assignee is identified bel to the USPTO or is being s E	ow, no assignee data will ubmitted under separate c (B) RESI	appear on the pover. Completic IDENCE: (CITY	patent. Inclusion of on of this form is N Y and STATE OR		gnment.
Please check the appropriate 4a. The following fee(s) are		•	nent of Fee(s):	u individual	corporation or other private g	roup entity u governmen
☐ Issue Fee		<u> </u>	. , ,	t of the fee(s) is en	closed.	
☐ Publication Fee		☐ Payme	ent by credit can	d. Form PTO-2038	is attached.	
☐ Advance Order - # of Co	opies	The Co	ommissioner is Account Numbe	hereby authorized i	by charge the required fee(s), or (enclose an extra copy of this	credit any overpayment, to form).
Commissioner for Patents is	requested to apply the Issu	•		`	usly paid issue fee to the applicat	
(Authorized Signature)	* '	(Date)				
NOTE; The Issue Fee and other than the applicant; interest as shown by the rec	a registered attorney or ag cords of the United States P	gent; or the assignee or atent and Trademark Offi	other party in ice.			
This collection of informa obtain or retain a benefit lapplication. Confidentiality estimated to take 12 minut completed application for case. Any comments on suggestions for reducing the Patent and Trademark Off NOT SEND FEES OR Commissioner for Patents,	It is governed by 35 U.S.C. it is to complete, including a m to the USPTO. Time we the amount of time you his burden, should be sent ice, U.S. Department of Completed FORMS	gathering, preparing, and ill vary depending upon	submitting the			

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/164,764	10/01/1998	DAVID SIDRANSKY	01107.76459	7055	
7.	590 08/07/2002	•	EXAMIN	ER	
BANNER & WI	•		SOUAYA, JEHANNE E		
1001 G STREET, 1 11TH FL.	N.W.		ART UNIT	PAPER NUMBER	
WASHINGTON, I	DC 20001		1634		
			DATE MAILED: 08/07/2002		

# Determination of Patent Term Extension under 35 U.S.C. 154 (b) (application filed after June 7, 1995 but prior to May 29, 2000)

The patent term extension is 0 days. Any patent to issue from the above identified application will include an indication of the 0 day extension on the front page.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)



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09/164,764	10/01/1998	DAVID SIDRANSKY	01107.76459	7055
75	90 08/07/2002		EXAMIN	ER
BANNER & WIT	COFF, LTD.		SOUAYA, JEH	IANNE E
1001 G STREET, N 11TH FL.	N.W.		ART UNIT	PAPER NUMBER
WASHINGTON, E	OC 20001		1634	
			DATE MAILED: 08/07/2002	

# Notice of Fee Increase on October 1, 2002

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after October 1, 2002, then the amount due may be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on October 1, 2002. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Notice of Proposed Rulemaking, 67 Fed. Reg. 30634, 30636 (May 7, 2002). Although a change to the amount of the publication fee is not currently proposed for October 2002, if the issue fee or publication fee is to be paid on or after October 1, 2002, applicant should check the USPTO web site for the current fees before submitting the payment. The USPTO Internet address for the fee schedule is: <a href="http://www.uspto.gov/main/howtofees.htm">http://www.uspto.gov/main/howtofees.htm</a>.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after October 1, 2002 (or mailed with a certificate of mailing on or after October 1, 2002), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Effective October 1, 2002, 37 CFR 1.18 is proposed to be revised to change the patent issue fees as set forth below. As stated above, the final fees may be a different amount, and applicant should check the web site given above when paying the fee.

(a) Issue fee for issuing each original or reissue patent, except a design or plant patent:

By a small entity (Sec. 1.27(a))--\$655.00 By other than a small entity--\$1,310.00

(b) Issue fee for issuing a design patent:

By a small entity (Sec. 1.27(a))--\$235.00 By other than a small entity--\$470.00

(c) Issue fee for issuing a plant patent:

By a small entity (Sec. 1.27(a))--\$315.00 By other than a small entity--\$630.00

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

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	Application No.	Applicant(s)				
Nedice of Allemahilite	09/164,764	SIDRANSKY, DAVID				
Notice of Allowability	Examiner	Art Unit				
	Jehanne Souaya	1634				
	Contains Coddyd	1.004				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.						
<ol> <li>This communication is responsive to</li> <li>The allowed claim(s) is/are 23-32,37,39-41 and 43-45.</li> <li>The drawings filed on are accepted by the Examiner.</li> <li>Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).         <ul> <li>All</li> <li>Some*</li> <li>None</li> <li>The drawings filed on are accepted by the Examiner.</li> </ul> </li> <li>Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).         <ul> <li>All</li> <li>Certified copies of the priority documents have been received.</li> </ul> </li> </ol>						
<ol><li>Certified copies of the priority documents have</li></ol>	been received in Application No	<u> </u>				
<ol> <li>Copies of the certified copies of the priority do         International Bureau (PCT Rule 17.2(a)).     </li> <li>* Certified copies not received:</li> </ol>	cuments have been received in this	national stage applicat	ion from the			
5. Acknowledgment is made of a claim for domestic priority u	nder 35 U.S.C. § 119(e) (to a provisi	onal application).				
(a) The translation of the foreign language provisional a	pplication has been received.					
6. Acknowledgment is made of a claim for domestic priority u	nder 35 U.S.C. §§ 120 and/or 121.					
Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of						
7. A SUBSTITUTE OATH OR DECLARATION must be subminFORMAL PATENT APPLICATION (PTO-152) which gives reas			OTICE OF			
<ul> <li>8.  CORRECTED DRAWINGS must be submitted.</li> <li>(a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached</li> <li>1)  hereto or 2)  to Paper No</li> <li>(b)  including changes required by the proposed drawing correction filed, which has been approved by the Examiner.</li> <li>(c)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No</li> </ul>						
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.						
9. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT FOR T			lote the			
Attachment(s)						
<ul> <li>1 □ Notice of References Cited (PTO-892)</li> <li>3 ☑ Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>5 □ Information Disclosure Statements (PTO-1449), Paper No</li> <li>7 □ Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ul>	4∏ Interview Summ 6∏ Examiner's Ame	al Patent Application (F ary (PTO-413), Paper ndment/Comment ement of Reasons for A	No			

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#### REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: the claims are drawn to detecting lung cancer in a sputum specimen comprising determining a microsatellite marker length alteration relative to a control sample, wherein a microsatellite marker length alteration in the specimen relative to the control sample indicates the presence of a cancer in a lung that which drains into the sputum. The claims are further drawn to detecting bladder cancer in a urine specimen comprising determining a microsatellite marker length alteration relative to a control sample wherein a microsatellite marker length alteration in the urine sample relative to the control sample indicates the presence of a cancer in an organ which drains into the urine. The claims are also drawn to a method of detecting cancer of an organ in a specimen of a body fluid which drains the organ wherein the specimen is selected from the group consisting of urine, sputum, bile, stool, cervical smears, tears, cerebral spinal fluid, and lymph nodes comprising detecting a microsatellite marker length alteration relative to a control sample, wherein a microsatellite marker length alteration in the specimen relate to the control sample indicates the presence of a cancer that drains in the organ which drains into the bodily fluid. The claims are allowable over the prior art because the prior art does not teach or fairly suggest a method of detecting bladder cancer or lung cancer or a cancer of an organ by detecting a microsatellite length alteration relative to a control sample in any of the following specimens: urine, sputum, bile, stool, cervical smears, tears, cerebral spinal fluid, and lymph nodes. The claims are

Application/Control Number: 09/164,764

Art Unit: 1634

allowable over the closest prior art of Brugieres, in view of Gonzalez-Zulueta, Merlo, and Ah-

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See because the claims no longer recite detecting a microsatellite length alteration in a blood

sample vs a control sample.

Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance."

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to examiner Jehanne Souaya whose telephone number is (703)308-6565. The

examiner can normally be reached Monday-Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Gary Jones, can be reached on (703) 308-1152. The fax phone number for this Group

is (703) 305-3014.

Any inquiry of a general nature should be directed to the Group receptionist whose

telephone number is (703) 308-0196.

Technology Center 1600

Jehanne Soraya Patent examiner

Art Unit 1634

7/21/02